CLAIMS:

The invention claimed is:

1. A method of forming a capacitor sequentially comprising:

forming an inwardly-tapered-sidewall spacer within an opening of a capacitor electrode forming layer;

depositing a first capacitor electrode layer over the inwardly-tapered-sidewall spacer within the opening; and

forming a capacitor dielectric region and then a second capacitor electrode layer over the first capacitor electrode layer.

2. The method of claim 1 wherein the inwardly-tapered-sidewall spacer comprises TiN.

3. The method of claim 2 wherein the capacitor electrode forming layer comprises polysilicon.

4. The method of claim 2 further comprising removing at least a portion of the inwardly-tapered-sidewall spacer after the depositing, the removing comprising exposing the inwardly-tapered-sidewall spacer to a mixture comprising H_2SO_4 and H_2O_2, the mixture having a weight ratio of H_2SO_4 to H_2O_2 of about 2:1.

5. The method of claim 1 wherein the inwardly-tapered-sidewall spacer comprises polysilicon.

6. The method of claim 5 wherein the first capacitor electrode layer comprises TiN.

7. The method of claim 6 further comprising, after depositing the first capacitor electrode layer, removing at least a portion of the inwardly-tapered-sidewall spacer, the removing comprising exposing the inwardly-tapered-sidewall spacer to TMAH.

8. The method of claim 1 wherein the opening comprises sidewalls and the inwardly-tapered-sidewall spacer resides over at least upper portions of the sidewalls.

9. The method of claim 1 wherein the opening comprises sidewalls and the inwardly-tapered-sidewall spacer resides over an entirety of the sidewalls.

10. The method of claim 1 wherein the opening comprises sidewalls and the inwardly-tapered-sidewall spacer resides over less than an entirety of the sidewalls.

11. The method of claim 1 wherein the opening comprises sidewalls and the capacitor electrode forming layer comprises an elevationally outermost surface proximate the opening, the sidewalls including straight linear portions which are angled from normal to the elevationally outermost surface.

12. The method of claim 11 wherein the straight linear portions are angled at least 5 degrees from normal to the elevationally outermost surface.

13. The method of claim 11 wherein the straight linear portions are angled at least 10 degrees from normal to the elevationally outermost surface.

14. The method of claim 11 wherein the straight linear portions are angled at least 15 degrees from normal to the elevationally outermost surface.

15. The method of claim 11 wherein the sidewall spacer comprises laterally inner sidewall portions, the laterally inner sidewall portions including straight linear portions which are angled normal to the elevationally outermost surface.

16. The method of claim 1 further comprising removing at least a portion of the inwardly-tapered-sidewall spacer after the depositing and prior to forming the capacitor dielectric region.

17. A method of forming a capacitor comprising:

providing a substrate having a capacitor electrode forming layer thereon, the capacitor electrode forming layer having an opening;

forming a sidewall spacer within the opening, the sidewall spacer being laterally thicker at an elevationally outer portion within the opening as compared to an elevationally inner portion within the opening;

forming a first capacitor electrode layer within the opening laterally over the sidewall spacer; and

removing at least a portion of the sidewall spacer and thereafter forming a capacitor dielectric region and a second capacitor electrode layer over the first capacitor electrode layer.

18. The method of claim 17 wherein the sidewall spacer comprises TiN.

19. The method of claim 18 wherein the forming the sidewall spacer comprises flowing $TiCl_4$ and NH_3 to the substrate to form TiN, the $TiCl_4$ and NH_3 being flowed at a volumetric ratio of $TiCl_4$ to NH_3 of from about 1:1 to about 4:1.

20. The method of claim 18 wherein the removing at least a portion of the sidewall spacer comprises exposing the spacer to a mixture comprising H_2SO_4 and H_2O_2, the mixture having a weight ratio of H_2SO_4 to H_2O_2 of about 2:1.

21. The method of claim 18 wherein first capacitor electrode layer comprises polysilicon.

22. The method of claim 17 wherein the sidewall spacer comprises polysilicon and the first capacitor electrode layer comprises TiN.

23. The method of claim 22 wherein the removing at least a portion of the sidewall spacer comprises exposing the spacer to TMAH.

24. The method of claim 17 wherein the opening comprises sidewalls and the sidewall spacer is formed over at least upper portions of the sidewalls.

25. The method of claim 17 wherein the opening comprises sidewalls and the sidewall spacer is formed over an entirety of the sidewalls.

26. The method of claim 17 wherein the opening comprises sidewalls and the capacitor electrode forming layer comprises an elevationally outermost surface proximate the opening, the sidewalls including straight linear portions which are angled from normal to the elevationally outermost surface.

27. The method of claim 26 wherein the straight linear portions are angled at least 5 degrees from normal to the elevationally outermost surface.

28. The method of claim 26 wherein the straight linear portions are angled at least 10 degrees from normal to the elevationally outermost surface.

29. The method of claim 26 wherein the straight linear portions are angled at least 15 degrees from normal to the elevationally outermost surface.

30. The method of claim 26 wherein the sidewall spacer comprises laterally inner sidewall portions, the laterally inner sidewall portions including straight linear portions which are angled normal to the elevationally outermost surface.

31. The method of claim 17 wherein the removing comprises removing at least a majority of the sidewall spacer.

32. The method of claim 17 wherein the removing comprises removing substantially all of the sidewall spacer.

33. A method of forming a capacitor comprising:

forming an opening within a capacitor electrode forming layer over a substrate, the opening comprising sidewalls;

depositing a spacing layer over the capacitor electrode forming layer to within the opening over at least upper portions of the sidewalls, the depositing forming the spacing layer to be laterally thicker at an elevationally outer portion within the opening as compared to an elevationally inner portion within the opening;

anisotropically etching the spacing layer to form a spacer within the opening, the spacer being laterally thicker at an elevationally outer portion within the opening as compared to an elevationally inner portion within the opening;

forming a first capacitor electrode layer within the opening laterally over the spacer; and

after forming the first capacitor electrode layer, removing at least a portion of the spacer and thereafter forming a capacitor dielectric region and a second capacitor electrode layer over the first capacitor electrode layer.

34. The method of claim 33 wherein the capacitor electrode forming layer comprises borophosphosilicate glass.

35. The method of claim 33 wherein the spacing layer comprises TiN.

36. The method of claim 35 wherein the first capacitor electrode layer comprises polysilicon.

37. The method of claim 35 wherein the removing at least a portion of the spacer comprises exposing the spacer to a mixture comprising H_2SO_4 and H_2O_2, the mixture having a weight ratio of H_2SO_4 to H_2O_2 of about 2:1.

38. The method of claim 35 wherein the depositing the spacing layer comprises flowing $TiCl_4$ and NH_3 to the substrate to form TiN.

39. The method of claim 38 wherein the $TiCl_4$ and NH_3 are flowed to the substrate simultaneously at a volumetric ratio of $TiCl_4$ to NH_3 of less than 4:1.

40. The method of claim 38 wherein the $TiCl_4$ and NH_3 are flowed to the substrate simultaneously at a volumetric ratio of $TiCl_4$ to NH_3 of from about 1:1 to about 3:1.

41. The method of claim 38 wherein the $TiCl_4$ and NH_3 are flowed to the substrate simultaneously at a volumetric ratio of $TiCl_4$ to NH_3 of about 1:1.

42. The method of claim 33 wherein the spacing layer comprises polysilicon and the first capacitor electrode layer comprises TiN.

43. The method of claim 42 wherein the removing at least a portion of the spacer comprises exposing the spacer to TMAH.

44. The method of claim 33 wherein the depositing the spacing layer occurs at a pressure of greater than 10 Torr.

45. The method of claim 33 wherein the depositing the spacing layer occurs at a pressure of from 10 Torr to 20 Torr.

46. The method of claim 33 wherein the depositing the spacing layer occurs at a pressure of greater than about 20 Torr.

47. The method of claim 33 wherein the depositing the spacing layer occurs at a temperature of at least 600°C.

48. The method of claim 33 wherein the depositing the spacing layer occurs at a temperature of from 600°C to 700°C.

49. The method of claim 33 wherein the depositing the spacing layer occurs at a temperature of at least 700°C.

50. The method of claim 33 wherein the depositing the spacing layer comprises depositing the spacing layer over an entirety of the sidewalls.

51. The method of claim 33 wherein the depositing the spacing layer comprises depositing the spacing layer over less than an entirety of the sidewalls.

52. The method of claim 33 wherein the etching forms the spacer over an entirety of the sidewalls.

53. The method of claim 33 wherein the etching forms the spacer over less than an entirety of the sidewalls.

54. The method of claim 33 wherein the capacitor electrode forming layer comprises an elevationally outermost surface proximate the opening, the sidewalls including straight linear portions which are angled from normal to the elevationally outermost surface.

55. The method of claim 54 wherein the straight linear portions are angled at least 5 degrees from normal to the elevationally outermost surface.

56. The method of claim 54 wherein the straight linear portions are angled at least 10 degrees from normal to the elevationally outermost surface.

57. The method of claim 54 wherein the straight linear portions are angled at least 15 degrees from normal to the elevationally outermost surface.

58. The method of claim 54 wherein the spacer comprises laterally inner sidewall portions, the laterally inner sidewall portions including straight linear portions which are angled normal to the elevationally outermost surface.

59. The method of claim 33 wherein the removing comprises removing at least a majority of the spacer.

60. The method of claim 33 wherein the removing comprises removing substantially all of the sidewall spacer.